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Implementing the Conservation Provisions

Cover: Maintaining residue cover reduces erosion and helps many producers stay in compliance. One of several ways to maintain adequate ground cover and reduce soil erosion is through crop residue management. This Plymouth County, Iowa, farmer uses mulch-tillage equipment to plant corn. (Gene Alexander photo)

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Comments from the SCS Chief:

SCS Is There To Help

If I had to pick just one message to send to farmers this year, it would be: your local Soil Conservation Service office is there to help.

We're a service organization. We're here to serve anyone who wants help with meeting farm bill conservation requirements. And when dealing with conservation compliance, we understand circumstances that can be a problem—one year it's a drought, the next it may be too much rain. We're making every effort to be flexible and fair in meeting the requirements of the law.

For example, a farmer whose conservation plan calls for 30 percent residue may have followed the recommended no-till operation but have been left with less than 30 percent residue because of unfavorable climatic conditions. SCS could issue a 1-year variance, find the producer to be actively applying the compliance plan, and schedule the farm for a spot check next year.

A lot of new, good technology is available through the district conservationist, the local extension agent, and State land-grant universities. Much of it is specifically tailored to the region or area. SCS and conservation district offices can help farmers use that technology in the best way possible.

Beyond conservation compliance, there are other provisions of the 1985 and 1990 farm bills, such as the Conservation Reserve Program and the wetlands provisions, that affect farmers and ranchers. So does the Clean Water Act, which is up for reauthorization in 1992. Once again, local SCS and conservation district offices will keep up to date with the latest information.

When it comes to providing help, that's what local SCS and conservation district offices have been doing for some 50 years. SCS's goal is to help get conservation practices on the land and to help farmers participate in U.S. Department of Agriculture (USDA) programs. We don't want to see any producers miss out because they didn't get help in time.

Chief

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Conservation Compliance

Conservation Compliance Continues in High Gear

FARMERS and ranchers have passed the 45-percent mark for completion of conservation plans they prepared under provisions of the 1985 and 1990 farm bills.

The most recent Soil Conservation Service data show a total of over 135 million acres covered by conservation plans. Of these, some 60 million acres, or 45.8 percent, are properties where all of the conservation practices called for in the conservation plans have been installed.

The SCS National Resources Inventory has identified the States with the most highly erodible land. Texas is at the top in this category, with about 12 million acres, while Montana and Kansas each have over 10 million acres. The States with the most acres having conservation compliance plans fully applied are Texas and Kansas, each with over 6 million acres in compliance.

Conservation plans that were developed before December 31, 1989, need to be completely implemented by December 31, 1994, if producers wish to participate in most USDA programs. For plans developed after December 31, 1989, the conservation plan must be implemented fully at the time the first agricultural commodity is planted.

SCS field office staffs provide technical expertise to determine which land is highly erodible and to help the USDA clients develop their conservation plans. Each year, farmers and ranchers must certify to USDA that they are actively applying their conservation plans. On an annual basis, SCS field offices check a 5-percent random sample to determine whether plans are being actively applied.

William Richards, SCS chief, summed up, "The farmer or rancher who stays in compliance gets continued eligibility for USDA program benefits, while USDA achieves the conservation objectives it was assigned by the 1990 farm bill." And, he added, "the American public gains the advantages of less soil erosion, less soil loose in the wind and water, and an improved rural landscape."

In Dubuque County, Iowa, an SCS district conservationist, left, talks with a farmer about how to achieve conservation compliance on his land. (Gene Alexander photo)

What Happens When CRP Ends?

A survey by the Soil and Water Conservation Society*

Purposes were to determine, once Conservation Reserve Program (CRP) contracts expire, (1) what plans contract holders might have for their CRP acres, and (2) what incentives contract holders might accept to keep at least some of the most fragile CRP acres out of crop production.

33,921,898	Acres in CRP through at least 1995
333,392	CRP contracts
2,769	Contract holders received questionnaires
2,016	Contract holders responded (their 366,818 acres were about 1 percent of CRP acreage)

Future use of CRP acres

Nearly a thousand respondents had decided their future uses; of them:
34%—crop with compliance plan measures;
33%—remain in grass (livestock forage, hay production);
19%—remain in trees or wildlife habitat;
8%—crop without compliance plan measures; and
6%—other.

Assessment of their CRP participation:

55%—very satisfied; **31%**—satisfied; **5%**—dissatisfied; and **9%**—other.

Single factor influencing CRP extension:

58%—economics; **24%**—lifestyle considerations; **14%**—conservation; and **4%**—other.

Incentives:

- Extend contract 5 years if Government pays half of fencing and water supply costs in last 2 years of current contract:
  13%—accepted; **51%**—rejected; and **36%**—undecided.
- Sell conservation easement to Government and retain no haying, grazing, or commodity cropping privileges:
  27%—accepted; **39%**—rejected; and **34%**—undecided.
  (An incentive to sell an easement with unrestricted haying and grazing privileges fared only slightly better.)
- Plant wildlife-habitat vegetation for soil-conserving continuation if Government cost-shares:
  50%—accepted; **23%**—rejected; and **27%**—other or undecided.
- Accept rental loss for looser restrictions:
  15% loss for unrestricted haying and grazing; **11%** loss for haying and grazing after mid-July.

Accept CRP contract extension with lower rental payment:

35% will accept 5-year extension; **32%** will accept 10-year extension.

In summary, CRP has been a successful program from the perspective of contract holders. But there is no one best means of extending the resource management benefits of CRP. Variable support exists for extending CRP contracts. Economics will dictate what contract holders do after contracts expire.

* SWCS, 7515 N.E. Ankeny Rd., Ankeny, IA 50021; 515/289-2331.

FOES Software Assists Planning

Computer software is being developed for Soil Conservation Service field offices to help with the design and implementation of conservation engineering practices. The first stage of the Field Office Engineering Software (FOES) project will help with the workload associated with applying conservation plans under the 1990 farm bill.

FOES covers erosion control practices such as terraces, diversions, and waterways. In addition to the design of these individual practices, the software assists in basic engineering activities such as surveying; studying hydrology, hydraulics, and earth sciences; and providing information for conservation plans. Within an SCS field office, all of the data available through other automated systems, including Soils Database, Climate Data, Computer Assisted Management and Planning System (CAMPS), and later Field Office Computing System (FOCS), will be accessible from within the FOES software.

The second stage of the multiyear FOES project is targeted to address the water-quality practice workload in SCS field offices. This stage will include practices that will provide the capability to develop waste utilization plans, assist with planning water and waste application measures, and complete engineering designs for components of water and waste management systems. Development of the FOES second stage is underway, with the software scheduled for field use early in 1993.

Scott Snover, Field Office Engineering Software project manager, SCS, Fort Collins, Colo.

Field Staff Promotes Compliance

The sign of successful implementation of a farmer's conservation plan, a corn crop in Ellis County, Tex., stands tall 7 weeks after planting. Residue on the ground helps combat soil erosion. (Gene Alexander photo)

"WE CARE about the environment but we care about you, too. Let us help." Johnston County farmers who visit the Soil Conservation Service field office in Smithfield, N.C., are greeted by a poster bearing this positive message.

The offer of help has been accepted for the most part, with the SCS field staff keeping the county's 2,786 farmers informed about the conservation compliance provisions contained in the 1985 and 1990 farm bills.

Johnston County lies on the divide between the Coastal Plain and Piedmont regions. It is one of the largest counties in the State and has the highest number of small-scale farmers.

"With some 56,000 acres of highly erodible cropland and an abundance of wetland in the county, farm bill implementation has been complicated," said William Harrell, SCS district conservationist, Smithfield, N.C. The diversity of the agricultural economy is an added complexity. Crops range from soybeans, sweet potatoes, corn, and flue-cured tobacco to truck crops. Cotton has increased from some 800 acres planted in 1987 to nearly 12,000 acres planted last year.

"Following the 1985 farm bill, the task of making highly erodible land and wetland determinations on about 8,000 tracts of land, as well as developing and implementing conservation plans on the highly erodible acreage, seemed impossible," recalled Harrell. However, by the December 31, 1989, deadline, SCS had helped farmers develop plans on most of the tracts.

SCS field office innovations that speeded progress include:

- Developing model plan narratives by land capability class;
- Using a "menu" approach to planning that emphasized cropping systems rather than structures to control soil erosion;
- Incorporating group planning as part of the total effort;
- Developing an instructional video to help farmers prepare their own plans;
- Contracting part of the determination workload with a consulting soil scientist; and
- Detailing SCS soil conservationists from nearby counties at times to share the workload.

Each year the SCS field staff wrote some 30 feature articles giving information about farm bill conservation compliance. They were published in the county's seven newspapers. Radio and television programs were prepared and presentations made to local farm and civic groups.

Anticipating related construction work in the county, SCS cooperated with the Land Improvement Contractors of America on a series of four workshops for earthmoving contractors.

As the December 31, 1994, final deadline for conservation compliance approaches, the SCS Smithfield field office staff finds that the path to total countywide compliance is still filled with challenges. However, the staff believes that the public's awareness and acceptance of farm bill conservation provisions will guarantee a successful result.

Mary Jo Stine, associate editor, *Soil & Water Conservation News*, SCS, Washington, D.C.

"SCS laid out the strips and we did the work ourselves."

Buffer Strips, Conservation Tillage Pay Off

COTTON ROWS alternate with green strips of grass for erosion control on the undulating slopes of the Allen Marsh farm in Limestone County, Ala.

Marsh is one of many Alabama farmers who are applying conservation practices to stay in compliance with conservation provisions of the 1985 and 1990 farm bills. Marsh leased the 488-acre farm and looked for an economical way to bring the eroded land back into cost-effective production.

"Marsh wanted to try out contour buffer strips gradually," noted Mark Swafford, Soil Conservation Service district conservationist in Limestone County. "While he was starting out, he used conservation tillage for soybeans and wheat that were in rotation with his cotton. This tillage method reduced erosion of the highly erodible land from about 30 tons per acre annually to less than 7 tons per acre."

"We put in the first buffer strips in 1988," recalled Marsh. "SCS laid out the strips and we did the work ourselves. I'm very satisfied with them."

Marsh applied lime and fertilizer and seeded fungus-free Kentucky 31 fescue at 50 to 60 pounds per acre, double-drilling the fescue. He has a long-term agreement with the Agricultural Stabilization and Conservation Service, which pays 60 percent of set-up costs of the 11 contour buffer strips.

In addition to controlling erosion, Marsh believes the buffer strips have improved his cotton crop. He found that the soil now retains more nutrients and moisture. As evidence, he noted that cotton yields went from a low of 525 pounds of cotton per acre in 1984 to a high of 945 pounds per acre in 1989.

"This year I may try putting a little cotton in conservation tillage between the strips," declared Marsh. "Last year I used wheat and rye for winter cover. I aim to stay fully in compliance with the farm bill."

Eugene Danner grows over 350 acres of peanuts in southeastern Alabama. He installed grassed buffer strips on leased land and thinks it is the way to go. "Planting grass is a lot cheaper than terracing," said Danner. "SCS laid out the strips and I plowed them up for peanut production."

Danner watched the SCS video "Conservation on Your Own" before tackling the job, which gave him a good understanding of how to lay out the strips. He believes that with a little help setting base lines, he can design his future buffer strips.

Danner had no startup expenses because the fields were already in grass. After part of the acreage has been used for peanut production for 2 or 3 years, there will be a cost when he changes the fields back to grass.

Peanuts are planted on the contour, following rye that serves as winter cover. An advocate of crop rotation, Danner said farmers in his area have learned that row crops do much better planted after grass.

Danner noted with satisfaction that during the historic 17-inch rainfall that flooded southeastern Alabama in March 1990, "the land I farm had been broken, but not planted, and no soil washed away."

Allen Marsh, left, shows off his cotton crop to Mark Swafford, SCS district conservationist, Athens, Ala. (Morris Gillespie photo)

Morris Gillespie, public affairs specialist, SCS, Auburn, Ala.

International Conservation

SCS'ers Visit, Learn from Danish Farms

FOUR SOIL Conservation Service representatives were among U.S. agricultural specialists touring Danish farms and visiting with Danish agricultural agency representatives during all of September 1990.

Communicating for Agriculture, a nonprofit organization operating out of Fergus Falls, Minn., sponsored the trip. They set up assignments to a number of countries to provide technology transfers. This trip (at no expense to SCS) provided the opportunity for Danes and Americans involved in natural resources to exchange ideas and information.

SCS participants were Ronald Lauster, deputy State conservationist, Albuquerque, N. Mex.; Harvey Mack, water quality specialist, Washington, D.C.; Thomas Sommer, area conservationist, Findlay, Ohio; and Dawn Genes, assistant State conservationist, Raleigh, N.C.

U.S. visitors learned that coalitions of various kinds in Denmark are common and, in some cases, have been formed to resolve differences. The Agency for Forests and Nature, under the Ministry of Environment, was once two separate agencies. They joined so conflicts of timber harvesting versus wildlife management would be settled internally.

A Danish scientist, right, explains to SCS'ers the mechanics involved in generating electricity at a windmill park in southwestern Denmark. (Thomas Sommer photo)

Denmark places high values on preserving agricultural land, natural areas, and forests. Agricultural land, used mostly for small grain production, is gently rolling and predominantly sandy.

Although forests cover only 10 percent of the land area, the Danes manage them very carefully. They consider heath land particularly special and manage vast acreages of heather for preservation. Wetlands have also come under greater protection.

During half the tour, visitors lived and worked on Danish farms. Hog operations and small dairies are the primary livestock enterprises, while a few farms have grain-only operations.

Since most farms are small and the barns are old, hand labor is quite common. Ford tractors are very popular. And the Danes love to plow!

During the tour, the Americans also lived and worked with employees of Hedselskabet, which closely translates to Danish Land Development Company. This 1,000-person company that designs and plants shelterbelts has many similarities with the work that SCS does.

Originally, their work involved land drainage and bringing marshland into production. In the past 15 years, there has been a movement to restore wetlands and return oxbows to streams.

The Minnesota outfit Communicating for Agriculture is quietly building a coalition of people who want to share not only their ideas but their homes—to be agricultural communicators as regards countries, cultures, and customs. The American guests hope they can return the favor by hosting one or more of the Danish hosts.

Dawn Genes, assistant State conservationist, SCS, Raleigh, N.C.

"Remember, there are hundreds of years of tradition being modified with the introduction of some of these land-use practices."

Teaching Conservation In Paraguay

"OFTEN TIMES a helping hand is needed," said Tom Gould, Soil Conservation Service district conservationist in Essex Junction, Vt. "But sometimes one hand is not enough."

Gould was relating experiences about his SCS assignment as a temporary teacher and soil conservationist with the Peace Corps in Paraguay during April 1990, "where I was one of many hands working."

"We need partnerships in conservation activities if long-term relief to such countries is to be achieved," Gould said. "And the cooperation needs to extend not only to the organizations involved but also to the Paraguayans we've touched and influenced."

Gould's assignment resulted through the cooperation of SCS's International Conservation Division, the Peace Corps' Office of Training and Program Support, and the Agency for International Development.

He worked with the Paraguay extension service and with Tom Hausman, a third-year Peace Corps volunteer, as he set up soil conservation training for Peace Corps volunteers.

Training objectives were:

- Teach soil conservation theories and practices;
- Provide information about, discuss, and practice suitable extension methods for teaching farmers; and
- Provide more information about the use of and types of green manures.

In addition, Gould began technical and field manuals on soil conservation in Paraguay.

"Not all volunteers we taught had soil conservation backgrounds," said Gould. "Some were beekeepers who, because of having intermittent free time, were willing to lend a hand to the conservation efforts."

During the training, Gould stressed salesmanship (and used it

As part of their soil conservation training, Peace Corp volunteers are introduced to low-tech methods of establishing contour lines with a "water level." (Thomas Gould photo)

in his teaching sessions) when talking about soil loss, how losses affected Paraguayans personally, and what soil conservation plans and actions would work.

"One person with the basic understanding of soil conservation and the ability to translate that into action can do more than 50 people who have all the knowledge in the world but no ability to sell," said Gould.

Gould said he emphasized the importance of personal appearance and behavior to the volunteers. "Local professionals dress quite neatly," he said. "Local farmers have high perceptions of what volunteers from the United States should be like and expect a high degree of professionalism in terms of dress and behavior."

"After the landowner makes a commitment and applies soil conservation practices to the land," Gould continued, "a more difficult phase begins: continuing that partnership with the landowner to ensure that practices are maintained and that questions are answered as they arise.

"At this point a working partnership between agencies and local groups becomes more instrumental. Without continued local support, more 'outside' efforts are likely to be ineffective.

"Remember, there are hundreds of years of tradition being modified with the introduction of some of these land-use practices. Peer pressure resulting from even a small change may lead to the return to the old ways if local support is not present."

In retrospect, Gould wished he had had more days in the field and more time to review course objectives with the Peace Corps instructors before and during the courses. Gould said that preparing the manual is a much greater task than anticipated—"I needed more 'writing' days at work after returning."

"I hope everyone will consider lending their talents to those in great need when the chance arises," added Gould. "You'll not only help people in the country or place you're working, but also gain a greater insight into how others live."

Paul G. DuMont, associate editor, *Soil & Water Conservation News,* SCS, Washington, D.C.

Chinese Botanist Learns U.S. Seed Secrets

GU ANLIN shies away from interviews. As her interpreter explained, "Only important people are interviewed in her homeland of China." Gu does not consider herself as an important person.

But the U.S. Department of Agriculture and the National Grasslands Research Institute in Huhehot, Inner Mongolia, People's Republic of China, will debate that point. They think any scientist who is the first to participate in a cultural and scientific exchange between two countries is very important.

Gu, an Institute botanist, worked for a year at the Soil Conservation Service's Plant Materials Center (PMC) in Bridger, Mont., to learn about the overall U.S. plant materials program and about large-scale forage plant seed production.

"Inner Mongolian climate is similar to that of the United States," said Larry Holzworth, SCS plant materials specialist in Bozeman, Mont. "Some of the same grass and legume genera exist in the two countries; for example, needlegrasses, wildryes, and vetches."

When Gu arrived at the center, she planted test plots of 16 different grasses and 4 legumes she brought from China. After the first year, Gu was generally satisfied with the growth of most plantings. She said final results will not be obvious for a couple more years.

Gu traveled throughout Montana and Wyoming to see how the center's work was being applied.

Gu said she was impressed with the overall PMC program and with how different agencies, private groups, and different levels of government all work together. She said it was easy to get information about plant materials from different locations in the United States. But to get this information in China, she would have to travel to

Upon her return...she will recommend that her country apply their research findings on the farm and ranch level for conservation purposes instead of keeping them at the university level.

Chinese botanist Gu Anlin trims back seedlings prior to transplanting in SCS Plant Materials Center in Bridger, Mont. As part of a cultural exchange program, Gu worked a year at the center before returning to Inner Mongolia. (SCS photo)

different locations to gather the information.

"Another difference I found here was that ordinary people are aware of the conservation and protection of the environment and their consequences," Gu said. "The U.S. government works directly with a farmer or rancher concerning land resource needs." In her country she said the government university system understands the importance of the environment, but "ordinary people do not."

Upon her return to the Institute, she will recommend that her country apply their research findings on the farm and ranch level for conservation purposes instead of keeping them at the university level.

Gu was impressed with how quickly good research findings were applied on U.S. farms and ranches. And she liked the better system of information management. She said she didn't actually learn to use the computer while she was at the center, but she could see that it was very efficient.

Gu returned to Inner Mongolia after a year at the center. She believes her visit has been important and the germ plasm shared between the United States and China "will be a benefit to the next generation."

Lori Bredow, public affairs specialist, SCS, Bozeman, Mont.

Conservation Success Stories

GPCP Highlights

THE GREAT PLAINS Conservation Program (GPCP) has been reauthorized by the 1990 farm bill, the Food, Agriculture, Conservation and Trade Act, extending the period for writing contracts to September 30, 2001. This legislation raised the GPCP ceiling for total expenditures to $1 billion.

Highlights of GPCP for the past 2 years included 10 new water-quality special projects, a project to help limited-resource farmers, changes in cost-share rates, and an increase in funds.

GPCP was set up under Soil Conservation Service administration to help farmers and ranchers prepare and implement a land-use treatment program that prevents or reduces the effects of the inconsistent climate of the Great Plains area.

Ten water-quality special projects were funded through GPCP in 1990 and 1991. Objectives of the projects included reducing nitrates in ground and surface water through nutrient and pest management practices in conjunction with irrigation water management, biologically controlling leafy spurge on rangeland with goats, mechanically controlling brush, and reducing sediment load of a major reservoir used for public water supply and recreation.

New Mexico started a special project for limited-resource farmers in Mora County last year.

An important part of the Great Plains Conservation Program is keeping track of the care and condition of rangeland such as this acreage in South Dakota. (Tim McCabe photo)

Farmers meeting GPCP contract eligibility requirements can receive cost-share rates up to 80 percent. A total of $40,000 was set aside for this effort in 1990.

GPCP has been in operation since 1958 in 10 States—Colorado, Kansas, Montana, Nevada, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming. The program has been expanded to include 38 counties in addition to the 518 counties already participating.

Kim Berry-Brown, contributing editor, *Soil & Water Conservation News,* SCS, Washington, D.C.

Illinois Plans With Local Input

RESOURCE planning by hydrologic units identifies and helps solve local resource problems in Illinois. It's the first step in "program neutral" planning which may lead to watershed planning. No planning occurs until local residents voice their enthusiasm or concerns regarding resource planning.

Biologists, engineers, agricultural economists, community planners, hydrologists, and public affairs specialists are working together on the technical components of watershed planning. This interagency approach allows Federal, State, county, and municipal governments, and various private agencies and organizations to more effectively find solutions and to obtain necessary watershed funding.

Resource planning can help solve difficulties with flooding, water quality and supply, wildlife, rural development, and land use. Such planning works with most community concerns.

Steps used in Illinois to help the public evaluate community resource problems are:

- An individual or group requests assistance from the soil and water conservation district (SWCD);
- The district forms a planning committee;
- Members of the community attend a planning meeting where resource problems are identified and prioritized;
- Agencies and organizations that can help with solutions participate as a part of the technical advisory committee;
- The advisory committee gathers data, evaluates the situation, and recommends alternative solutions, based on the assessments;
- The planning committee chooses the plan they think is best for the community and proposes it to the district; and
- The SWCD approves the plan and provides assistance and coordination in carrying out the plan.

There are periodic reviews, evaluations, and updates of concerns that were initially addressed in the resource planning process.

The Soil Conservation Service in Illinois began using this resource planning in 1985. In 1988, SCS designated a full-time State community planner position. In 1989, SCS held a series of training workshops to help boost resource planning techniques at the field level.

The information/education program in the State helped promote resource planning. SWCD newsletters described success stories.

By September 1990, SCS had worked with 150 committees of local people in Illinois to solve community resource problems. Over 75 counties are involved with resource planning; 64 plans have been developed; and planning has begun on 37 hydrologic units, including lakes in State parks.

Mayor Sammy Ulen of Ullin, Ill., right, Gail Dishongh, SCS sociologist, left, and Sheryl Paczwa, SCS agricultural economist, discuss resource planning to help solve problems caused by flooding. The city of Ullin has flooded several times since 1986. (Kay Kitchen-Maran photo)

Kay Kitchen-Maran, public affairs specialist, SCS, Champaign, Ill.

Tribal Tree Planting Combats Erosion

AS EARTH TEAM volunteers, 25 members of the Southern Ute Tribe in Colorado planted over 20,000 trees during spring 1990, including cottonwood and willow seedlings, to fight soil erosion and improve wildlife habitat.

"The willows and cottonwoods planted on tribal lands in the Spring Creek Arroyo bottomlands should reduce erosion there substantially," said Dan Lynn, Soil Conservation Service district conservationist, Durango, Colo. Previously, gully erosion caused by periodic flooding and by irrigation return flows from adjacent lands had averaged as high as 60 tons of soil per acre annually, according to Lynn.

"Willow and cottonwood foliage are used in religious and ceremonial events, such as the Bear Dance and the Sun Dance," explained Don Heaney, Southern Ute agricultural extension director. "So we have another real need for these trees on Native American lands."

In a project proposal to the Colorado State Forest Service nursery in Fort Collins, Heaney and Lynn requested the trees. In response, the nursery donated 20,000 hybrid cottonwood and golden willow seedlings.

Evelyn Cuthair and Lalena Knight plant willows for erosion control and riparian improvement along Spring Creek Arroyo. (Jerry Schwien photo)

At the same time, the Southern Ute Tribe purchased and planted 1,500 scotch pines. These trees will be managed as a cash crop and harvested for Christmas tree sales.

Heaney predicted that in 7 to 10 years there will be sales revenue. "With typical Christmas trees in the Durango area selling for $3 per foot, the income can be significant," he noted.

"If the tree planting project proves successful, we will donate more cottonwoods and willows, as long as tribal volunteers will plant them," summed up Dan Wand, who works for the Colorado State Forest Service. Southern Ute representative Vida Peabody expressed the tribe's happiness with the trees and hopes that the project will continue.

Jerry Schwien, public affairs specialist, SCS, Lakewood, Colo.

"We hope to have enough sweetgrass to meet their needs."

Saving the Sweetgrass

IN THE South Carolina low country near Charleston, African-American craftspeople have been making coiled grass baskets since the late 1600's. The baskets are mainly fashioned from sweetgrass, formally known as *Muhlenbergia filipes*, its scientific name.

Artisans collect native sweetgrass, as well as needle rush, longleaf pine needles, and palmetto leaves, and then weave the materials together by hand in a craft brought to this country by their ancestors.

In recent years, production of the beautiful baskets has been threatened because plentiful supplies of sweetgrass were no longer readily available. "Changing uses of coastal lands and the limiting of access to low-country dunes where the grass grows explain the dwindling supply," said Ann Christie, then SCS district conservationist in Charleston.

In 1988, Soil Conservation Service staffers became interested in helping solve the problem. Earlier that year, a daylong sweetgrass conference in Charleston had outlined the difficulties of the basket makers, who often traveled as far as Florida to collect materials. Christie conferred with Keith Salvo, SCS plant materials specialist in Raleigh, N.C., and they came up with a long-term plan to help grow sweetgrass near the people who use it. The plan considers factors affecting the grass such as cultivation, transplanting, insects, diseases, pesticide use, and harvesting methods.

The Basketmakers Association, headed by Mary Jackson, of Mount Pleasant, S.C., welcomed the SCS proposal to help solve the resource problem. Some 300 South Carolina families belong to the association.

SCS'er Christie and the Lowcountry Resource Conservation and Development (RC&D) Council went further by involving 16 groups and agencies in the work. The finished plan laid out duties and responsibilities over a 5-year period for each group.

Joseph Mezyck, a member of the Basketmakers Association, harvests sweetgrass on Kiawah Island. (Ann Rose photo)

In March 1989, Salvo sent sweetgrass samples to the Americus, Ga., and Brookville, Fla., SCS plant materials centers for evaluation. That fall, SCS planted sweetgrass at the Clemson University Experiment Station near Charleston.

"SCS research showed that sweetgrass needs moist soil conditions to grow prolifically. Nursery or production fields must have a high water table or must be irrigated," noted Salvo.

A dramatic break for the RC&D project came in November 1990. SCS was offered the chance to grow sweetgrass on a 5-1/2- acre area of Palm Key, near Ridgeland, S.C., which is owned by the Beaufort-Jasper Water and Sewer Authority. Plots are irrigated with wastewater, with the sweetgrass and other plantings helping to filter and clean the water as it passes.

The Basketmakers Association and SCS'ers aided the project by collecting a truckload of sweetgrass plants that were threatened by development of a golf course on Kiawah Island. Association volunteers and SCS staffers transplanted the grass to the Palm Key site.

"We hope to have enough sweetgrass to meet their needs," said Salvo. In about 3 years, the basketmakers should be able to harvest the Palm Key sweetgrass.

Steve Edwards, coordinator, Lowcountry Resource Conservation and Development Council, Walterboro, S.C.

'Lines on the Land'...makes conservation practices easily understood by rural and urban youngsters.

'Lines on the Land' Teaches Conservation

IT'S LIKE CHEESE on a pizza! We're talking about crop residue, of course. That is one of several analogies used in "Lines on the Land," an educational package that makes conservation practices easily understood by rural and urban youngsters.

Targeted at 6th through 8th grade students, "Lines on the Land" focuses on soil and water conservation. It's a three-part package that includes a 10-minute video, a 24-page brochure, and 16 learning activities.

The videotape helps viewers become familiar with lines on the country landscape—both erosion lines and lines made by soil and water conservation practices. At the same time, comparisons are made to explain how the conservation practices work. Among the comparisons are:

- Crop residue and cheese on pizza;
- A grassed waterway and a waterslide;
- Contour stripcropping and the American flag;
- Terraces and eave spouts on a house; and
- Crop rotations and a quilt.

The 24-page brochure's 60 illustrations show conservation and erosion on the land to further explain what the lines on the land mean. The brochure also tells what causes erosion and explains how to reduce it, highlighting 12 conservation practices.

Also included in the package are 16 learning activities written by teachers for teachers. Using an eye dropper and a pan of soil, for example, students learn how raindrops strike unprotected soil, carry away soil particles, and form gullies.

In another activity, students check streamwater for sediment. They determine whether soil erosion is a problem in their community and see firsthand how it affects their water.

Each activity stands alone; and can be integrated with a variety of subjects including math, literature, history, and art.

The package was a joint effort between the Iowa Association of Soil and Water Conservation District Commissioners, the USDA's Soil Conservation Service, the Iowa Department of Agriculture and Land Stewardship's Division of Soil Conservation, the University of Northern Iowa's Institute for Environmental Education, and the National Association of Conservation Districts (NACD). Packages can be ordered for $26 each from NACD, P.O. Box 855, League City, TX 77574, or call 1-800/825-5547.

"Lines on the Land" is an educational package used to teach 6th through 8th grade students about conservation practices. (Colleen Weinzetl photo)

Jeffrey Vonk, State conservationist, Des Moines, Iowa, and **Dan Bruene,** president, Iowa Association of Soil and Water Conservation District Commissioners, Gladbrook, Iowa

NEWS Briefs

New Blade Helps in Terracing

Farmers will build millions of feet of terraces by 1994 to implement their highly erodible land (HEL) conservation plans. One concern farmers have is the limited number of contractors to build new terraces and to do repairs and maintenance on older systems. Part of the answer may come from new kinds of equipment like the tractor blade designed, built, and marketed by Vernon "Buck" Buchanan of Pawnee, Okla.

"This blade would allow many farmers to build or repair terraces on their own and could be used for other farm jobs, too," Buchanan said.

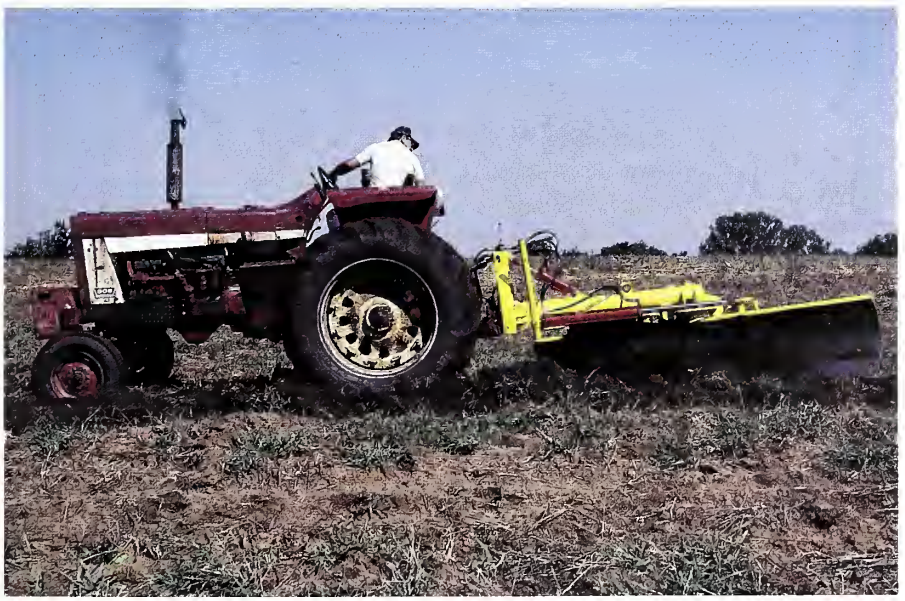
The blade is designed to fit on tractors with a three-point hitch. Although tractor blades have been used for many years, Buchanan says his blade has unique features that others don't, mainly tied to a patented top link to the boom cylinder.

Buchanan has a brochure and video that highlight features of the blade that can be hydraulically controlled from the tractor seat. They include:

- Blade positioning at any angle;
- Positive control of side draft of the blade;
- Ability to dig deep narrow ditches by angling and tilting the blade and retracting the cylinder;
- About 30 inches of ground clearance; and
- Up to 34-inch-tall blades to move more soil.

The blade comes in 8-, 10-, 12-, 14-, and 16-foot sizes. Information about the blade is available from Vernon Buchanan, Route 3, Box 145, Pawnee, OK 74058.

Dwain Phillips, public affairs specialist, SCS, Stillwater, Okla.



Vernon "Buck" Buchanan, a farmer in Pawnee, Okla., asserts that the tractor blade he designed has features that other blades do not. (Dwain Phillips photo)

TPIA Sponsors Recognize Farm Family

The Take Pride in America (TPIA) Conservation Farm Program sponsors selected Doug and Dianne Thompson's farm as the first nationally recognized TPIA conservation farm. Their farm in rural Nebraska was recognized for its irrigation management, ridge tillage, and other conservation practices.

The 3-year TPIA Conservation Farm Program honors farms and ranches that feature comprehen-

CORRECTION: Garden Project Blooms news brief of September-October 1991 issue, should have read, "was sponsored by the Eastern Connecticut Resource Conservation and Development Council" and the council president is Felix Pocius, who was quoted.

sive conservation plans addressing erosion, water quality, wildlife habitat, forest management, animal waste, and related concerns. The program's goal is to honor an outstanding conservation farm or ranch in each of the 3,000 conservation districts.

The Thompsons received a TPIA roadside sign during a ceremony at the National Association of Conservation Districts Northern Plains Regional Meeting; a tour of the 900-acre farm followed. The event was covered by local newspapers, television, and radio, as well as the Nebraska news section of *USA Today*.

The farm has been owned by the Thompson family for 110 years. Doug and Dianne Thompson's children represent the fifth generation to live on the farm.

Of the Thompson's 900 acres, 750 are planted to corn and soybeans. They use ridge-till planting throughout their farming operations.

Doug Thompson converted his irrigation system from gravity to pivot for conservation purposes. He plans to use the system for chemical irrigation—a process that improves the efficiency of fertilizer application through irrigation water. He also planted 450 trees to protect the native sod. Tree planting surpasses what his conservation plan requires.

The TPIA program is sponsored by local conservation districts, the National Association of Conservation Districts, the U.S. Department of Agriculture, the Goodyear Tire & Rubber Company, and the National Association of State Conservation Agencies.

Sign Promotes Conservation

Passersby will know conservation farmers by the "Proud to be Conservation Farmers" sign. This sign was designed to give credit to those farmers who are using conservation practices approved by the U.S. Department of Agriculture.

The idea is part of the *Farm Journal's* Farm Stewardship Campaign—a public relations effort highlighting farmers who protect natural resources. "Farmers deserve credit for implementing their conservation plans, both with their neighbors and with the nonfarm community," said Darrell Smith, *Farm Journal* field editor.

The signs are available from Interstate Graphics, 7490 Forest Hills Road, Rockford, IL 61111; telephone 815/877-6777.

News Briefs is complied and edited by **Kim Berry-Brown,** contributing editor, *Soil & Water Conservation News.*

This sign is designed to recognize those farmers who wisely conserve their resources. (Darrell Smith photo)

NEW on Tape

The Wealth in Wetlands

Five farmers who have reaped the rewards of conserving and restoring wetlands on their farms are featured in a new videotape called "The Wealth in Wetlands."

The 23-minute video is a joint project of the USDA's Soil Conservation Service, the National Association of Conservation Districts (NACD), Ducks Unlimited, *Successful Farming* magazine, the U.S. Department of the Interior's Fish and Wildlife Service, and the National Fish and Wildlife Foundation. It is being distributed nationally to motivate farmers and ranchers to maintain and protect valuable wetlands on their properties, as well as to showcase such efforts to the public.

Narrated by actor Leslie Nielsen, the video provides a brief overview of wetlands losses in the United States, illustrates wetlands restoration techniques, and lists organizations and agencies that landowners can contact for help with wetlands restoration and conservation projects.

Copies are available on loan from local conservation districts and other sponsors. The 1/2-inch VHS tape also may be purchased for $10 plus handling costs from the NACD Service Center, P.O. Box 855, League City, TX 77574-0855; telephone 800/825-5547.

Clean Water, Clear Choices

The National Association of Conservation Districts (NACD) has teamed up with the U.S. Environmental Protection Agency (EPA) to produce the videotape "Clean Water, Clear Choices: the Challenge of Nonpoint Source Pollution." The 13-minute production graphically depicts the causes and extent of nonpoint source water pollution problems in the United States, as well as nonpoint source pollution's harmful effects on the environment, human health, and local economies.

"Clean Water, Clear Choices" provides case studies—one urban and one rural—of successful local efforts to combat nonpoint source pollution. It makes the case that, with adequate government support and funding, local conservation districts and cooperating agencies have the ability to combat this serious threat to the country's waters.

Also available from NACD and EPA is a companion brochure that lists EPA offices, State soil and water conservation agencies, and State water quality agencies that can answer questions and provide assistance with nonpoint source pollution control efforts.

Copies of the 1/2-inch VHS tape may be borrowed from these agencies or NACD, or purchased for $8 plus handling costs from the NACD Service Center, P.O. Box 855, League City, TX 77574-0855; telephone 800/825-5547.

Moving?
Send present mailing label and new address including zip code to:

U.S. Department of Agriculture
Soil Conservation Service
P.O. Box 2890, Room 6002-S
Washington, D.C. 20013-2890

Official Business
Penalty for private use, $300

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Conservation Calendar

January	11-16	National Turkey Federation Annual Convention, San Antonio, Tex.
	12-16	American Farm Bureau Federation's 73rd Annual Meeting, Kansas City, Mo.
	19-24	National Council of Farmer Cooperatives 63rd Annual Meeting, Orlando, Fla.
	28-29	Thirteenth Annual 1992 Eastern Iowa Conservation Tillage Show, Cedar Rapids, Iowa
February	1-5	Southern Association of Agricultural Scientists 89th Annual Meeting, Lexington, Ky.
	2-6	National Association of Conservation Districts Annual Convention, Reno, Nev.
	9-14	Society for Range Management's 45th Meeting, Spokane, Wash.
	15-22	Future Farmers of America (FFA) Week
	18-21	International Erosion Control Association Conference, Reno, Nev.
March	15-21	National Agriculture Week
	20	National Agriculture Day
	26-29	National Science Teachers Association Convention, Boston, Mass.
	27-April 1	57th North American Wildlife and Natural Resources Conference, Charlotte, N.C.
April	6-9	"Global Warming-A Call For International Coordination," Third International Conference, Chicago, Ill.
	24-27	International Association of Fairs and Expositions (IAFE) 24th Annual Spring Conference, Seattle, Wash.
	26-May 3	National Soil and Water Stewardship Week